Receipt &
Box Seq

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: **Nemerow et al.**

Serial No.: 09/903,327

Filed: July 10, 2000

For: **BIFUNCTIONAL MOLECULES AND VECTORS COMPLEXED THEREWITH FOR TARGETED GENE DELIVERY**

Art Unit: 1632

I hereby certify that this paper and the attached papers are being deposited with the United States Postal Service as first class mail in an envelope addressed to:
Commissioner for Patents
Box Missing Parts
Washington, D.C. 20231, on this date.

10/19/2001
Date

Robert Wickman

RESPONSE TO NOTICE TO FILE MISSING PARTS AND NOTICE TO COMPLY

Commissioner for Patents
Box Missing Parts
Washington, D.C. 20231

Sir:

In response to the Notice to File Missing Parts mailed August 30, 2001, the following documents are submitted herewith:

1) A copy of the Notice to File Missing Parts;
2) Executed Declaration for Patent Application;
3) Two (2) Assignments from the inventors to **The Scripps Research Institute** along with a Recordation Form Cover Sheet;
4) Amendment and Response to Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures;
5) Executed Verified Statement Pursuant to 37 § C.F.R. 1.821(f);
6) Computer Readable Form (CRF) of Sequence Listing;
7) A check in the amount of $170 which includes the $130 large entity surcharge, and $40 assignment recordation fee.

U.S.S.N. 09/903,327
NEMEROW et al.
RESPONSE TO NOTICE TO FILE MISSING PARTS

☒ The Commissioner is hereby authorized to charge any fee, including any submitted herewith if the attached check(s) is in the wrong amount or otherwise improper or missing, that may be due in connection with this and the attached papers, or with this application during its entire pendency to or to credit any overpayment to Deposit Account No. 50-1213. A duplicate of this sheet is enclosed.

Respectfully submitted,
HELLER EHRMAN WHITE & McAULIFFE LLP

By: _____
Stephanie Seidman
Registration No. 33,779

Attorney Docket 22908-1228B
Address all correspondence to:
HELLER EHRMAN WHITE & McAULIFFE LLP
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San Diego, California 92122-1246
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E-mail: sseidman@HEWM.com

UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
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APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/903,327	07/10/2001	Glen R. Nemerow	22908-1228B

CONFIRMATION NO. 7374

FORMALITIES LETTER

OC000000006498822

Stephanie Seidman
Heller Ehrman White & McAuliffe LLP
6th Floor
4350 La Jolla Village Drive
San Diego, CA 92122

Date Mailed: 08/30/2001

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is missing.
  A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of $130 for a non-small entity, must be submitted with the missing items identified in this letter.
- **The balance due by applicant is $ 130.**

- This application does not contain a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). Applicant must provide such statement. If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000).
- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

For questions regarding compliance to these requirements, please contact:

- **For Rules Interpretation, call (703) 308-4216**

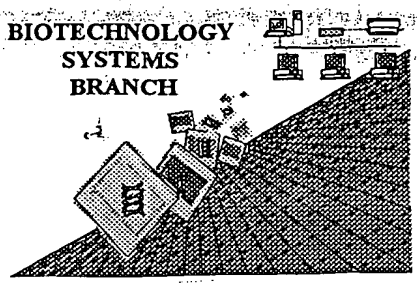
01/22/2002 SLUANG1 00000143 09903327
01 FC:105 130.00 OP

- **To Purchase PatentIn Software, call (703) 306-2600**
- **For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov**

A copy of this notice MUST be returned with the reply.

Customer Service Center
Initial Patent Examination Division (703) 308-1202
PART 2 - COPY TO BE RETURNED WITH RESPONSE

BIOTECHNOLOGY SYSTEMS BRANCH



+9

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/903,327

Source: OIPE

Date Processed by STIC: 7/24/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
http://www.uspto.gov/web/offices/pac/checker

Raw Sequence Listing Error Summary

ERROR DETECTED | SUGGESTED CORRECTION | SERIAL NUMBER: 09/903,327

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 ___ Wrapped Nucleics / Wrapped Aminos — The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2 ___ Invalid Line Length — The rules require that a line not exceed 72 characters in length. This includes white spaces.

3 ___ Misaligned Amino Numbering — The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4 ___ Non-ASCII — The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5 ___ Variable Length — Sequence(s) ___ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6 ___ PatentIn 2.0 "bug" — A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.

7 ___ Skipped Sequences (OLD RULES) — Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8 ___ Skipped Sequences (NEW RULES) — Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

9 ___ Use of n's or Xaa's (NEW RULES) — Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10 ___ Invalid <213> Response — Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence

11 ___ Use of <220> — Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

12 ___ PatentIn 2.0 "bug" — Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/903,327

DATE: 07/24/2001
TIME: 11:08:21

Input Set : A:\es.txt
Output Set: N:\CRF3\07242001\I903327.raw

pm 2,4,6

Does Not Comply
Corrected Diskette Needed

3 <110> APPLICANT: Nemerow, Glen R.
4 Li, Erguang
6 <120> TITLE OF INVENTION: BIFUNCTIONAL MOLECULES AND VECTORS COMPLEXED THEREWITH FOR ARGETED
7 GENE
8 DELIVERY
10 <130> FILE REFERENCE: 22908-1228
12 <140> CURRENT APPLICATION NUMBER: US/09/903,327
13 <141> CURRENT FILING DATE: 2001-07-10
15 <150> PRIOR APPLICATION NUMBER: ~~converted to a provisional from~~ 09/613,017
16 <151> PRIOR FILING DATE: 2000-07-10
18 <160> NUMBER OF SEQ ID NOS: 33
20 <170> SOFTWARE: FastSEQ for Windows Version 4.0

Delete - just show prior serial no.

RRORED SEQUENCES

22 <210> SEQ ID NO: 1
23 <211> LENGTH: 1516
24 <212> TYPE: DNA
25 <213> ORGANISM: Mouse
27 <220> FEATURE:
28 <221> NAME/KEY: CDS
29 <222> LOCATION: (28)...(1395)
30 <223> OTHER INFORMATION: DAV-1 heavy chain, penton base monoclonal antibody
32 <400> SEQUENCE: 1

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33 cagacactga acacactgac tctaacc atg gga tgg agc tgg atc ttt ctc ttc     54
34                               Met Gly Trp Ser Trp Ile Phe Leu Phe
35                                1               5                  -
37 ctc ctg tca gga act gca ggc gtc cac tct gag gtc cag ctt cag cag      102
38 Leu Leu Ser Gly Thr Ala Gly Val His Ser Glu Val Gln Leu Gln Gln
39  10                  15                  20                  25
41 tca gga cct gag ctg gtg aaa cct ggg gcc tca gtg aag ata tcc tgc      150
42 Ser Gly Pro Glu Leu Val Lys Pro Gly Ala Ser Val Lys Ile Ser Cys
43                  30                  35                  40
45 aag gct tct gga tac aca ttc act gac tac aac atg cac tgg gtg aag      198
46 Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr Asn Met His Trp Val Lys
47              45                  50                  55
49 cag agc cat gga aag agc ctt gag tgg att gga tat att tat cct tac      246
50 Gln Ser His Gly Lys Ser Leu Glu Trp Ile Gly Tyr Ile Tyr Pro Tyr
51          60                  65                  70
53 aaa ggt ggt act ggc tac aac cag aag ttc aag agc aag gcc aca ttg      294
54 Lys Gly Gly Thr Gly Tyr Asn Gln Lys Phe Lys Ser Lys Ala Thr Leu
55      75                  80                  85
57 aca aca gac agt tcc tcc aac aca gcc tac atg gag ctc cgc agc ctg      342
58 Thr Thr Asp Ser Ser Ser Asn Thr Ala Tyr Met Glu Leu Arg Ser Leu
59  90                  95                  100                 105
61 aca tct gat gcc tct gca gtc tat tac tgt gca aga ggg att gct tac      390
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RAW SEQUENCE LISTING DATE: 07/24/2001
PATENT APPLICATION: US/09/903,327 TIME: 11:08:21

Input Set : A:\es.txt
Output Set: N:\CRF3\07242001\I903327.raw

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 62 Thr Ser Asp Ala Ser Ala Val Tyr Tyr Cys Ala Arg Gly Ile Ala Tyr
 63                 110                 115                 120
 65 tgg ggc caa ggg act ctg gtc act gtc tct gca gcc aaa acg aca ccc      438
 66 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ala Ala Lys Thr Thr Pro
 67             125                 130                 135
 69 cca tct gtc tat cca ctg gcc cct gga tct gct gcc caa act aac tcc      486
 70 Pro Ser Val Tyr Pro Leu Ala Pro Gly Ser Ala Ala Gln Thr Asn Ser
 71         140                 145                 150
 73 atg gtg acc ctg gga tgc ctg gtc aag ggc tat ttc cct gag cca gtg      534
 74 Met Val Thr Leu Gly Cys Leu Val Lys Gly Tyr Phe Pro Glu Pro Val
 75     155                 160                 165
 77 aca gtg acc tgg aac tct gga tcc ctg tcc agc ggt gtg cac acc ttc      582
 78 Thr Val Thr Trp Asn Ser Gly Ser Leu Ser Ser Gly Val His Thr Phe
 79 170                 175                 180                 185
 81 cca gct gtc ctg cag tct gac ctc tac act ctg agc agc tca gtg act      630
 82 Pro Ala Val Leu Gln Ser Asp Leu Tyr Thr Leu Ser Ser Ser Val Thr
 83                 190                 195                 200
 85 gtc ccc tcc agc acc tgg ccc agc gag acc gtc acc tgc aac gtt gcc      678
 86 Val Pro Ser Ser Thr Trp Pro Ser Glu Thr Val Thr Cys Asn Val Ala
 87             205                 210                 215
 89 cac ccg gcc agc agc acc aag gtg gac aag aaa att gtg ccc agg gat      726
 90 His Pro Ala Ser Ser Thr Lys Val Asp Lys Lys Ile Val Pro Arg Asp
 91         220                 225                 230
--> 93 tgt ggt tgt aag cct tgc ata tgt aca gtc cca gaa gta tca tct gtc  (765)774
 94 Cys Gly Cys Lys Pro Cys Ile Cys Thr Val Pro Glu Val Ser Ser Val
 95     235                 240                 245
 97 ttc atc ttc ccc cca aag ccc aag gat gtg ctc acc att act ctg act      822
 98 Phe Ile Phe Pro Pro Lys Pro Lys Asp Val Leu Thr Ile Thr Leu Thr
 99 250                 255                 260                 265
101 cct aag gtc acg tgt gtt gtg gta gac atc agc aag gat gat ccc gag      870
102 Pro Lys Val Thr Cys Val Val Val Asp Ile Ser Lys Asp Asp Pro Glu
103                 270                 275                 280
105 gtc cag ttc agc tgg ttt gta gat gat gtg gag gtg cac aca gct cag      918
106 Val Gln Phe Ser Trp Phe Val Asp Asp Val Glu Val His Thr Ala Gln
107             285                 290                 295
109 acg caa ccc cgg gag gag cag ttc aac agc act ttc cgc tca gtc agt      966
110 Thr Gln Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Ser Val Ser
111         300                 305                 310
113 gaa ctt ccc atc atg cac cag gac tgg ctc aat ggc aag gag ttc aaa     1014
114 Glu Leu Pro Ile Met His Gln Asp Trp Leu Asn Gly Lys Glu Phe Lys
115     315                 320                 325
117 tgc agg gtc aac agt gca gct ttc cct gcc ccc atc gag aaa acc atc     1062
118 Cys Arg Val Asn Ser Ala Ala Phe Pro Ala Pro Ile Glu Lys Thr Ile
119 330                 335                 340                 345
121 tcc aaa acc aaa ggc aga ccg aag gct cca cag gtg tac acc att cca     1110
122 Ser Lys Thr Lys Gly Arg Pro Lys Ala Pro Gln Val Tyr Thr Ile Pro
123                 350                 355                 360
125 cct ccc aag gag cag atg gcc aag gat aaa gtc agt ctg acc tgc atg     1158
126 Pro Pro Lys Glu Gln Met Ala Lys Asp Lys Val Ser Leu Thr Cys Met
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RAW SEQUENCE LISTING DATE: 07/24/2001
PATENT APPLICATION: US/09/903,327 TIME: 11:08:21

Input Set : A:\es.txt
Output Set: N:\CRF3\07242001\I903327.raw

```
127                365                 370                 375
129 ata aca gac ttc ttc cct gaa gac att act gtg gag tgg cag tgg aat     1206
130 Ile Thr Asp Phe Phe Pro Glu Asp Ile Thr Val Glu Trp Gln Trp Asn
131         380                 385                 390
133 ggg cag cca gcg gag aac tac aag aac act cag ccc atc atg gac aca     1254
134 Gly Gln Pro Ala Glu Asn Tyr Lys Asn Thr Gln Pro Ile Met Asp Thr
135     395                 400                 405
137 gat ggc tct tac ttc gtc tac agc aag ctc aat gtg cag aag agc aac     1302
138 Asp Gly Ser Tyr Phe Val Tyr Ser Lys Leu Asn Val Gln Lys Ser Asn
139 410                 415                 420                 425
141 tgg gag gca gga aat act ttc atc tgc tct gtg tta cat gag ggc ctg     1350
142 Trp Glu Ala Gly Asn Thr Phe Ile Cys Ser Val Leu His Glu Gly Leu
143                 430                 435                 440
145 cac aac cac cat act gag aag agc ctc tcc cac tct cct ggt aaa         1395
146 His Asn His His Thr Glu Lys Ser Leu Ser His Ser Pro Gly Lys
147                 445                 450                 455
149 tgatcccagt gtccttggag ccctctggtc ctacaggact ctgtcaccta cctccacccc   1455
150 tccctgtata ataaagcac ctagcactgc cttgggaccc tgcaataaaa aaaaaaaaaa   1515
151 a                                                                  1516
735 <210> SEQ ID NO: 12
736 <211> LENGTH: 510
737 <212> TYPE: PRT
738 <213> ORGANISM: Artificial Sequence
740 <220> FEATURE:
741 <223> OTHER INFORMATION: Fusion protein with N-terminal portion of DAV-1 heavy chain
742       and IGF-1 mature peptide
744 <400> SEQUENCE: 12
745 Met Gly Trp Ser Trp Ile Phe Leu Phe Leu Leu Ser Gly Thr Ala Gly
746  1               5                  10                  15
747 Val His Ser Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys
748             20                  25                  30
749 Pro Gly Ala Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe
750         35                  40                  45
751 Thr Asp Tyr Asn Met His Trp Val Lys Gln Ser His Gly Lys Ser Leu
752     50                  55                  60
753 Glu Trp Ile Gly Tyr Ile Tyr Pro Tyr Lys Gly Gly Thr Gly Tyr Asn
754 65                  70                  75                  80
755 Gln Lys Phe Lys Ser Lys Ala Thr Leu Thr Thr Asp Ser Ser Ser Asn
756                 85                  90                  95
757 Thr Ala Tyr Met Glu Leu Arg Ser Leu Thr Ser Asp Ala Ser Ala Val
758             100                 105                 110
759 Tyr Tyr Cys Ala Arg Gly Ile Ala Tyr Trp Gly Gln Gly Thr Leu Val
760         115                 120                 125
761 Thr Val Ser Ala Ala Lys Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala
762     130                 135                 140
763 Pro Gly Ser Ala Ala Gln Thr Asn Ser Met Val Thr Leu Gly Cys Leu
764 145                 150                 155                 160
765 Val Lys Gly Tyr Phe Pro Glu Pro Val Thr Val Thr Trp Asn Ser Gly
766                 165                 170                 175
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RAW SEQUENCE LISTING DATE: 07/24/2001
PATENT APPLICATION: US/09/903,327 TIME: 11:08:21

Input Set : A:\es.txt
Output Set: N:\CRF3\07242001\I903327.raw

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767 Ser Leu Ser Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Asp
768             180                 185                 190
769 Leu Tyr Thr Leu Ser Ser Ser Val Thr Val Pro Ser Ser Thr Trp Pro
770         195                 200                 205
771 Ser Glu Thr Val Thr Cys Asn Val Ala His Pro Ala Ser Ser Thr Lys
772     210                 215                 220
773 Val Asp Lys Lys Ile Val Pro Arg Asp Cys Gly Cys Lys Pro Cys Ile
774 225                 230                 235                 240
775 Cys Thr Val Pro Glu Val Ser Ser Val Phe Ile Phe Pro Pro Lys Pro
776                 245                 250                 255
777 Lys Asp Val Leu Thr Ile Thr Leu Thr Pro Lys Val Thr Cys Val Val
778             260                 265                 270
779 Val Asp Ile Ser Lys Asp Asp Pro Glu Val Gln Phe Ser Trp Phe Val
780         275                 280                 285
781 Asp Asp Val Glu Val His Thr Ala Gln Thr Gln Pro Arg Glu Glu Gln
782     290                 295                 300
783 Phe Asn Ser Thr Phe Arg Ser Val Ser Glu Leu Pro Ile Met His Gln
784 305                 310                 315                 320
785 Asp Trp Leu Asn Gly Lys Glu Phe Lys Cys Arg Val Asn Ser Ala Ala
786                 325                 330                 335
787 Phe Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Arg Pro
788             340                 345                 350
789 Lys Ala Pro Gln Val Tyr Thr Ile Pro Pro Pro Lys Glu Gln Met Ala
790         355                 360                 365
791 Lys Asp Lys Val Ser Leu Thr Cys Met Ile Thr Asp Phe Phe Pro Glu
792     370                 375                 380
793 Asp Ile Thr Val Glu Trp Gln Trp Asn Gly Gln Pro Ala Glu Asn Tyr
794 385                 390                 395                 400
795 Lys Asn Thr Gln Pro Ile Met Asp Thr Asp Gly Ser Tyr Phe Val Tyr
796                 405                 410                 415
797 Ser Lys Leu Asn Val Gln Lys Ser Asn Trp Glu Ala Gly Asn Thr Phe
798             420                 425                 430
799 Ile Cys Ser Val Leu His Glu Phe Gly Pro Glu Thr Leu Cys Gly Ala
800         435                 440                 445
801 Glu Leu Val Asp Ala Leu Gln Phe Val Cys Gly Asp Arg Gly Phe Tyr
802     450                 455                 460
803 Phe Asn Lys Pro Thr Gly Tyr Gly Ser Ser Ser Arg Arg Ala Pro Gln
804 465                 470                 475                 480
805 Thr Gly Ile Val Asp Glu Cys Cys Phe Arg Ser Cys Asp Leu Arg Arg
806                 485                 490                 495
807 Leu Glu Met Tyr Cys Ala Pro Leu Lys Pro Ala Lys Ser Ala
--> 808             500                 505
```

SIO <- insert number

1156 <210> SEQ ID NO: 30
1157 <211> LENGTH: 96
1158 <212> TYPE: DNA
1159 <213> ORGANISM: Artificial Sequence
1161 <220> FEATURE:
1162 <223> OTHER INFORMATION: PCR sense primer for subcloning EGF into DAV-1/EGF
1163 fusion construct.

next page

RAW SEQUENCE LISTING DATE: 07/24/2001
PATENT APPLICATION: US/09/903,327 TIME: 11:08:21

Input Set : A:\es.txt
Output Set: N:\CRF3\07242001\I903327.raw

format error see Item 1 on Error Summary Sheet

1165 <400> SEQUENCE: 30
--> 1166 gaattcaata gtgactctga atgtcccctg tcccacgatg ggtactgcct ccatgatggt 60
1167 60
1168 gtgtgcatgt atattgaagc attggacaag tatgca 96
1170 <210> SEQ ID NO: 31
1171 <211> LENGTH: 98
1172 <212> TYPE: DNA
1173 <213> ORGANISM: Artificial Sequence
1175 <220> FEATURE:
1176 <223> OTHER INFORMATION: PCR antisense primer for subcloning EGF into DAV-1/EGF
1177 fusion construct.
1179 <400> SEQUENCE: 31
--> 1180 gaattctagc gcagttccca ccacttcagg tctcggtact gacatcgctc cccgatgtag 60
1181 60
1182 ccaacaacac agttgcatgc atacttgtcc aatgcttc 98

same error

<210> 5
<211> 1314
<212> DNA
<213> Mouse

coding region begins with base at location 1

<220>
<221> CDS (1)
<222> (0)..(1314)
<223> Portion of DAV-1 heavy chain used for fusion protein
bifunctional antibody

<400> 5

```
atg gga tgg agc tgg atc ttt ctc ttc ctc ctg tca gga act gca ggc       48
Met Gly Trp Ser Trp Ile Phe Leu Phe Leu Leu Ser Gly Thr Ala Gly
 1               5                  10                  15
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VERIFICATION SUMMARY DATE: 07/24/2001
PATENT APPLICATION: **US/09/903,327** TIME: 11:08:22

Input Set : **A:\es.txt**
Output Set: **N:\CRF3\07242001\I903327.raw**

:12 M:270 C: Current Application Number differs, Replaced Current Application Number
:93 M:254 E: No. of Bases conflict, LENGTH:Input:765 Counted:774 SEQ:1
:350 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#:5, CDS LOCATION: (0)...
1314)
:808 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:12
:1166 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:30
:1180 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:31